



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/565,210

01/20/2006

Benjamin Elias

22409-00312-US

9182

30678

7590

04/24/2009

CONNOLLY BOVE LODGE & HUTZ LLP
1875 EYE STREET, N.W.
SUITE 1100
WASHINGTON, DC 20006

EXAMINER

PHAM, EMILY P

ART UNIT

PAPER NUMBER

2838

MAIL DATE

DELIVERY MODE

04/24/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/565,210 | Applicant(s) ELIAS ET AL. | |
| | Examiner EMILY PHAM | Art Unit 2838 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) 1-11, 26-28, and 34-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-25, and 29-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/20/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 12-25 and 29-33 in the reply filed on 01/12/2009 is acknowledged.
2. Claims 1-11, 26-28, and 34-38 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim.

Drawings

3. The drawings are objected to because FIG 5A and FIG 6A have typo errors in labels: "bettery" should be "battery". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the

Art Unit: 2838

changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

4. Claim 13 is objected to because of the following informalities: claim 13 submitted on 1/12/2009 and marked as "previously presented" is different from claim 13 submitted on 8/18/2008: the amended part is missing. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 12, 13, and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation "the determined current" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2838

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 12-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Trembley (USP 6,768,286).

Regarding claim 12: Trembley (**FIG 4; Detailed Description**) discloses a system for operating a rechargeable battery, said system comprising: means (**Microcontroller with Memory 406**) for maintaining current by delivering a predetermined current (**during first phase battery is charged with a constant current**) to said rechargeable battery until said rechargeable battery is charged to a predetermined maximum voltage (**first voltage**) (**col. 4, line 59 – col. 5, line 13**); means (**Microcontroller with Memory 406**) for maintaining voltage by delivering decreasing step-function current to said rechargeable battery to maintain the maximum voltage until said delivered current reaches a predetermined minimum current; means (**Microcontroller with Memory 406**) for determining a cyclical current to be delivered to said rechargeable battery by said current maintaining means and said voltage maintaining means during a cycle; and means (**Microcontroller with Memory 406**) for correcting said determining means when the determined current is not being delivered to said rechargeable battery.

Regarding claim 13: Trembley (**FIG 4; Detailed Description**) discloses the system, wherein said voltage maintaining means (**Microcontroller with Memory 406**) engages after said rechargeable battery to said predetermined maximum voltage.

Art Unit: 2838

Regarding claim 14: Trembley (**FIG 4; Detailed Description**) discloses the system, wherein said determining means (**Microcontroller with Memory 406**) comprises means for integrating current delivered to said rechargeable battery.

Regarding claim 15: Trembley (**FIG 4; Detailed Description**) discloses the system, wherein said predetermined current and said predetermined minimum current are different (**constant current, predetermined current; col. 4, line 50 – col. 5, line 13**).

Regarding claim 16: Trembley (**FIG 4; Detailed Description**) discloses the system, wherein said predetermined voltage and said predetermined maximum voltage are different (**first voltage, second voltage; col. 4, line 50 – col. 5, line 13**).

Regarding claim 17: Trembley (**FIG 4; Detailed Description**) discloses the system, wherein said predetermined current may be dynamically adjusted based on parameters of said rechargeable battery (**temperature, voltage, current; col. 4, line 50 – col. 5, line 34**).

Regarding claim 18: Trembley (**FIG 4; Detailed Description**) discloses the system, wherein said predetermined voltage may be dynamically adjusted based on parameters of said rechargeable battery (**temperature, voltage, current; col. 4, line 50 – col. 5, line 34**).

Regarding claim 19: Trembley (**FIG 4; Detailed Description**) discloses the system, wherein said predetermined minimum current may be dynamically adjusted based on parameters of said rechargeable battery (**temperature, voltage, current; col. 4, line 50 – col. 5, line 34**).

Art Unit: 2838

Regarding claim 20: Trembley (**FIG 4; Detailed Description**) discloses the system, wherein said predetermined maximum voltage may be dynamically adjusted based on parameters of said rechargeable battery (**temperature, voltage, current; col. 4, line 50 – col. 5, line 34**).

9. Claims 29-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Wilhelm (USP 5,500,561).

Regarding claim 29 (as best understood): Wilhelm (**FIG 2; Detailed Description of the Preferred Embodiments**) discloses a battery charger for an electronic device, said battery charger comprising:

- a rechargeable battery source (**34**) configured to cyclically charge and discharge said electronic device;
- a measuring circuit (**10; col. 5, lines 10-16**) configured to measure one or more parametric data (**real time consumed power as a parameter**) during said charging and discharging;
- an auxiliary power source (**AC to DC power supply 38; col. 8, lines 9-12**) configured to power said electronic device when said rechargeable battery source is removed from operation of the device independently of said rechargeable battery source;
- a testing circuit (**14, 20, 32, 28**) configured to test said measuring circuit for offset error while said rechargeable battery is removed from operation of the device; and
- a reducer circuit (**48**) configured to isolate said rechargeable battery from said device by reducing current flow from said rechargeable battery to said device to a minimal value;

Art Unit: 2838

wherein said testing circuit **(14, 20, 32, 28)** is enabled during said isolation of said rechargeable battery **(34)** from said device.

Regarding claim 30: Wilhelm **(FIG 2; Detailed Description of the Preferred Embodiments)** discloses the battery charger, wherein said testing circuit is further configured to correct any offset error **(34)** while said rechargeable battery source **(34)** is isolated from said device.

Regarding claim 31: Wilhelm **(FIG 2; Detailed Description of the Preferred Embodiments)** discloses the battery charger, wherein said parametric data **(peak power demand)** includes cumulative charge **(power accumulated in the storage battery)**.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 21-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trembley (USP 6,768,286).

Regarding claim 21: Trembley discloses the claimed invention except for predetermined maximum voltage is less than 57.6 volts. It would have been obvious to one having ordinary skill in the art at the time the invention was made to set the predetermined maximum voltage less than 57.6 volts, since it has been held that

Art Unit: 2838

discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 22: Trembley discloses the claimed invention except for said predetermined minimum current is less than 1 ampere. It would have been obvious to one having ordinary skill in the art at the time the invention was made to set the predetermined minimum current less than 1 ampere, since it has been held that discovering the optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 23-25: Trembley discloses the claimed invention except for rechargeable battery used for an implantable medical device which is a prosthetic hearing implant which is a totally implantable prosthetic hearing implant. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

12. Claims 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilhelm (USP 5,500,561).

Wilhelm discloses the claimed invention except for electronic device is an implantable medical device which is a receiver/stimulator unit of prosthetic hearing implant system. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Response to Arguments

13. Applicant's arguments filed on 8/18/2008 with respect to claims 12 and 29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. Applicant's amendment necessitated filed on 8/18/2008 the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EMILY PHAM whose telephone number is (571)270-3046. The examiner can normally be reached on Mon-Thu (7:00AM - 6:00PM).

Art Unit: 2838

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm Ullah can be reached on (571) 272 - 2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jessica Han/
Primary Examiner, Art Unit 2838
April 2009

/E. P./